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Vol. 38. No. 1

CAMBRIDGE, MASS., WEDNESDAY, APRIL 3, 1918

Price Three Cents

TECHNIQUE RUSH TO OPEN JUNIOR WEEK

Technique band to Play Funeral
Dirge While Institute Heroes
Struggle for the Valued Tech-
nique 1919 Copies

UNDERTAKERS PROVIDED

As a predecessor of the foremost events of the spring term, the Junior Prom and Tech Show, Technique Rush, that celebration at which the whole undergraduate body of the Institute will be in its true element, will make its annual appearance. For the benefit of the great number of newcomers at Technology this year, it may be said that Technique Rush is an annual occurrence, staged by the reigning board of Technique, at which the more daring and foolhardy souls of the Institute struggle and fight for twenty copies of the year book, which have been autographed by President MacLaurin. To further inspire the scientific minds of the students the first four and the twentieth copies are given away to the victorious warriors.

Technique 1919 Rush, as that of last year, will be held in the great court, where the pebbles will make better falling places for those whose courage was greater than their endurance, than the hard sidewalks and paving stones in the vicinity of Copley Square where the rush has been held in former years. In addition to this, the few trees scattered about the court will be welcome refuge to the contestants, in comparison with the smooth brick walls of the buildings in Boston. The most important advantage of the great court over Boston's streets is the fact that the Institute will not afterward be responsible for dead and mangled students, but can procure immediate attention for them within its own grounds.

The memorable day of the rush has been decided as April 17, the first day of Junior week; the time, one o'clock in the afternoon; the place the great court; and the participants, Technology as a body, to say nothing of the Technique Band. To all except the junior freshman this most wonderful collection of harmonizing instruments has been once before introduced at Field Day, but this was indeed a poor representation of the size and quality of the complete band. The band has grown year by year until now its proportions have been approached by few similar organizations in the whole country. Its quality of tone certainly needs no publicity, except to say that when a prominent leader of a Boston band heard a former Technique band playing the march, "Our Director," he remarked that it was the best option of "Nearer My God To Thee" that he had ever heard. With such a compliment the band hardly needs further mention, except concerning the management which expresses the hope to see more and new men out for the various departments. The excuse that one cannot play an instrument is a poor one. Possession is the thing that counts.

At the time set for the beginning of operations, the band will lead a parade of the various contingents around the court and the grounds of the Institute, until the time set for hostilities to begin. Then the active contestants will be allowed to enter the roped-off area which has in its center the shack containing the tablets, representative of the copies of the year book. The shack is a portable building of heavy truss framed sides and roof, which has in it one small window, large enough for part of a person to get into. Inside the building there are twenty numbered tablets of unbreakable material, which represent the autographed copies of Technique 1919. When the starting gun is fired the contestants rush to the building, endeavor to pile into the window by hook or crook, fighting desperately until victorious or vanquished in the struggle. Broken bones, blackened eyes and other injuries, even in view of the coming Junior Prom are all braved by the anxious warriors, in their desire to get the much prized Techniques, which contain the autograph of President MacLaurin.

ARRANGEMENTS MADE FOR STUDENTS TO WORK IN SHIPYARDS DURING SUMMER

Plan to House the Men in Y. M. C. A. Huts Now Being
Constructed—Present High Wages to be Paid

When the task of defeating the German submarines and thereby protecting the freedom of the seas first came to the immediate notice of the American people, it became apparent at once, that the only method was to increase the available shipping tonnage of the United States. To accomplish this by means of the usual, large steel freight ships, was immediately considered impracticable, and left as the only solution, a new merchant marine of small wooden ships. The great problem of this work was the procuring of sufficient labor, of an adaptable sort, to commence the work of preparing ways and docks for these ships.

To obtain these men the government sent out a call for 250,000 men of all trades and professions to report for immediate work in the shipyards. Men were needed in at least twenty-five distinctly different trades, all of which required skilled workmen; in addition to several types of work where unskilled labor of unlimited dimensions was sought. The work of the Institute students would be of the former class, for

the training which has been given them, even in their short term, has prepared them in one way or another to do work requiring a fair degree of skill. The employment which would appeal especially to the students is that of carpenters, welders, electricians, machinists, painters, plumbers, and metal workers. These are by no means, however, the only trades in which many of the students might be interested.

It may at first seem that there is no need for such men as Technology might offer, but if a fair view be taken of the needs of a single shipyard, its justification may easily be seen. In former times it was not possible to work over 125 men on one ship at a time, but as conditions are now, records have been made of 500 men working on one ship to good advantage. Where formerly the carpenter, for instance, did not rely upon inaccurate drawings, but measured and sawed each piece himself, he now can depend upon the accurate plans of ships which have been univer-

(Continued on page 2)

1921 SWIMMING MEET

Greene and Biddell Star in
Struggle With English High

At the Cambridge Y. M. C. A. on Saturday last the 1921 swimming team came to a tie conclusion with English High, the resulting score being 22-22. Biddell was easily the star of the contest, winning the 50-yd. dash, the 100-yd. swim, and the plunge. Greene won the 150-yd. race and performed well in his other events. Technology easily won the relay. The diving contest was omitted owing to the shallow water in the Cambridge tank. The team was greatly handicapped by the absence of Winn in the plunge and also by the loss of Shaw. The meet was very exciting from start to finish and the final score was in doubt till the last minute. In view of the loss of two of her surest point-getters, the team showed up very well and deserves a great deal of credit. The summary:

160-yd. relay, won by Technology (McGrath, Young, Greene and Trowbridge); second, English High (Biddell, Richardson, McCafferty and Connell). Time 1 29 4-5.

50-yd. dash, won by Biddell, English High; second, Young, Technology; third, McGrath, Technology. Time 22 1-5s.

150-yd. swim, won by Greene, Technology; second, Richardson, English High; third, McCafferty, English High. Time 2m, 14c.

Plunge for distance, won by Biddell, English High; second, Harrison, English High; third, Lee, Technology. Distance 57 ft.

100-yd. swim, won by Biddell, English High; second, Greene, Technology; third, Trowbridge, Technology. Time 1m, 5s.

TECH SHOW TICKETS TO BE
PLACED ON SALE SOON.

Within a day or so cards will be sent out by the management to the undergraduate body and those desiring tickets to the show will fill out the cards indicating the tickets and mail them back to the management as directed on the cards. The orders for seats will be filled as they are received; consequently those desiring the best seats are advised to be prompt. It will be remembered that there are five performances of the show, two at Northampton the afternoon and evening of Thursday, April 18, two in Boston at the Opera House the afternoon and evening of Saturday, April 20, and one at Somerville which is within easy range of the street cars, Monday evening, April 22. The Somerville performance will come in particularly handy for those who are going home Junior Week and will not be back till Monday.

HARVARD ALUMNI BULLETIN DISCUSSES MCKAY MILLIONS

"The Science of Usefulness" to Be a
Part of Harvard's Curriculum

So much has been said about the Gordon McKay millions and their relation to the Harvard-Technology merger, that the following article taken from the Harvard Alumni Bulletin may be of interest to readers of The Tech.

The resolutions recently adopted by the Harvard Liberal Club of Boston with reference to the McKay Endowment propose, by way of climax, that "the science of usefulness" shall be included in the curriculum of the future Harvard school of applied science. This recalls the proposal made, if we are not mistaken, by Dickens, that somebody should establish a "Society for the Promotion of Everything." The suggestion of the Liberal Club serves the useful purpose of "bringing up with a round turn" the general discussion that has been going on. In its course there has been a manifest tendency so to extend the meaning of "applied science" that almost every branch of learning might fall within its scope. The Liberal Club has illustrated this point. Its special interest may fairly be designated as "usefulness," and to the science of usefulness it would see the McKay funds applied. This may well act as a sanative reminder that it is the will of Gordon McKay and the Court's interpretation of it as the expression of the testator's wish that must determine the plans of the University.

In the light of all that has occurred we do not believe there is any ground for the fear of the Liberal Club that a hasty decision is imminent; nor do we imagine the Corporation to need any urging to give ear to the opinions of those who "can aid constructively." Whatever lack of general discussion may have preceded the agreement that has now been declared invalid, the next arrangement for instruction in applied science at Harvard cannot escape such benefits as may accrue from the fullest possible expression of all manner of opinions bearing upon the subject. Some light is thrown from every side. President MacLaurin of Technology, for example, touching in his recently issued annual report upon the curtailment of Technology's income through the decision of the Court, says: "The whole amount (applied by Harvard to the co-operative arrangement) is less than one-tenth of the annual expenditure of the Institute. It must not be supposed, therefore, that the Institute will be crippled financially if the agreement with the University is abandoned."

NEW BRANCH OF NAVAL RESERVE ESTABLISHED FOR UNDERGRADUATES

Enlistment Open to Students Over Eighteen Years
of Age Pursuing Strictly Technical
Courses

RECRUITING PARTY AT INSTITUTE

A branch of the Naval Reserve somewhat resembling the present Engineer's Reserve of the Army has been created whereby technical students enrolling in the same are enabled to continue their courses, be exempt from the draft, and upon graduation be re-examined for commissions.

SENIOR PORTFOLIO NOTICE

Owing to the small number of informals which were handed in this year, these pictures cannot be included in the senior portfolio. They may be obtained by calling at the office of the Superintendent of Buildings and Power, room 3-005.

CORPORATION XV

H. J. Horn '88 and Prof. Carver
to Speak at Smoker

Corporation XV will hold a smoker-meeting Thursday evening at 7:30 o'clock in the Walker Memorial. There will be a brief business meeting at which it will be necessary to elect a secretary due to the resignation of W. C. Wilson '18. Following the meeting there will be speeches by Prof. Carver of Harvard who will talk on "Essential and Non-essential Industries in War Time," and Henry J. Horn '88, who will tell of some of his recent experiences as vice-chairman of the U. S. Railroad Commission to Russia. Both of these speakers have attained national prominence in their respective professions and what they have to say will be valuable and very interesting.

Proctor '20 and Collins '19 have been paired to furnish the music for the evening and refreshments and smokes will be furnished as usual.

ALL-COLLEGE RALLY PROVES GREAT SUCCESS FINANCIALLY

After Expenses Are Paid, Over \$1000
Remains for University Union.

The All-College rally at the Boston Opera House last month, when James M. Beck of New York made his much discussed speech against any peace parleys at this time, resulted in the clearing of more than \$1000 for the work of the American University Union in France. Chairman Louis J. Cadieux and Treasurer Warner Marshall of the general committee have just made their final report to the whole committee, and the fund will be turned over at once to Roger Pierce of Harvard, the secretary of the union. The expenses of the affair were about \$1300. It seems wholly likely that the organization which made a success of this novel venture will be made permanent, to the end that similar intercollegiate gatherings may be possible in the future. More than 40 colleges and universities participated in the rally, and the committee representing them, and especially the secretaries of their Boston alumni associations, constitute an organization that may be very useful year by year. The fame of the rally spread across the country, and Buffalo, Indianapolis and Ithaca are among the cities that have held gatherings, or which are planning to hold them, patterned on it. Moreover, the rally gave a lot of worth-while publicity to the splendid work that the American University Union is doing for our college boys overseas.

ARCHITECTURAL SOCIETY

The Architectural Society will hold a business meeting for the election of officers on Friday, April 5, at 5.00 o'clock.

A recruiting party headed by Lieutenant Stolba is now at the Institute and may be consulted in Walker Memorial, room 307. The delegation left Boston February 17, and visited the University of Maine, New Hampshire State College, Dartmouth and Worcester Polytechnical Institute. The recruiting organization is sent out by the Bureau of Navigation to enroll students, taking technical courses of study, for service along their own special lines after graduation. The campaign has been successful so far, for over one hundred students were examined at the last college of whom eighty-two were accepted.

The methods of Lieutenant Stolba are not the usual ones of the recruiting officer, such as appealing to the patriotism of the audience. The government is in this case after specialists, and will visit only such institutions whose efforts are confined to technical pursuits.

Since their arrival at Technology, many applicants have been received, but in some cases, it has been necessary for the applicant to communicate with their local draft boards, stating that they would not be needed to fill their current quota. This is necessary in all cases when the man had to register on June 5, 1917.

This is a very good opportunity for any engineering student to get into service, and then when called to active duty, use his education to the mutual advantage of the government and himself. Since the Navy Department is taking over many industrial plants, opening up experiment stations, and building dry docks, also doing various constructive work, both on this side and in Europe, there will be wonderful opportunities for men to obtain attractive positions. With each man enrolled, an experience report is forwarded to the Bureau of Navigation, stating his education in detail, languages spoken or written, and subjects in which he has specialized at college, so that the department is able to tell where to use a man to best advantage. The applicants are confined to those undergraduates taking Civil, Mechanical, Electrical, Marine Engineering and Naval Architecture. The men will not be called to act as seamen, but in order to be eligible for a commission, men must be enrolled as seamen, second class, which simply puts them on the

(Continued on page 2)

NEWS MEETING

There will be a meeting of all men connected with the news staff on Thursday at 1:05 o'clock in THE TECH office.

CALENDAR

Wednesday, April 3, 1918

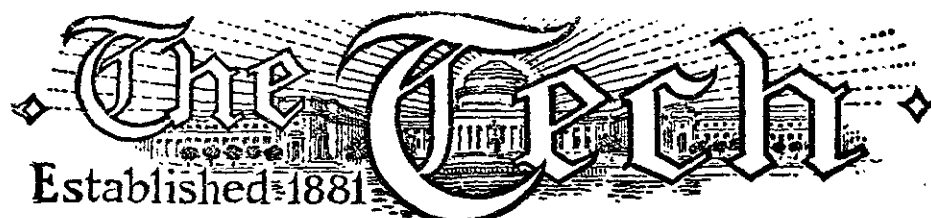
5:00 P.M. Cast, Chorus and Orchestra combined rehearsal in the Caf.
7:30 P.M. Cast rehearsal in room 2-190.

Thursday, April 4, 1918

5:00 P.M. Orchestra rehearsal in the Caf.
7:00 P.M. Ballet rehearsal at the New England Conservatory of Music.
7:30 P.M. Corporation XV Smoker-Walker Memorial.
8:00 P.M. Management meeting at the Show office.

Friday, April 5, 1918

5:00 P.M. Cast, Chorus and Orchestra combined rehearsal in the Caf.
7:30 P.M. Cast and Chorus rehearsal in the Boston Opera House.



Entered as second-class matter, September 16, 1911, at the Post Office at Boston, Mass., under the act of Congress of March 3, 1879.

Published twice a week during the college year by students of the Massachusetts Institute of Technology.

MANAGING BOARD

Paul C. Leonard '17.....Chairman of the Board
Donald D. Way '19.....General Manager
Count B. Capps '20.....Managing Editor
Lincoln B. Barker '21.....Circulation Manager

Subscription \$1.50 for 53 issues, in advance. Single copies 3 cents.
Subscriptions within the Boston Postal District or outside the United States must be accompanied by postage at the rate of one cent a copy. Issues mailed to all other points without extra charge.

News Offices, Charles River Road, Cambridge, Mass. News Phones, Cambridge 2600; Tuesday and Thursday after 7 p. m., Cambridge 6265. Business Offices, Charles River Road, Cambridge, Mass. Business Phone, Cambridge 2600.

Although communications may be published unsigned if so requested, the name of the writer must in every case be submitted to the editor. The Tech assumes no responsibility, however, for the facts as stated nor for the opinions expressed.

The Editor-in-Chief is always responsible for the opinions expressed in the editorial columns, and the Managing Editor for the matter which appears in the news columns.

IN CHARGE THIS ISSUE

H. V. Howes '20.....Night Editor
R. H. Smithwick '21.....Assistant Night Editor

WEDNESDAY, APRIL 3 1918

COMPANY

TECHNOLOGY is enjoying "company" just now. We have quite a number of guests, almost as many guests as there are of us and we ought to put forth a bit of an effort to make them at home and show them a good time. We ought to work hard to send them away from Tech with a good taste in their mouths and a memory of New England hospitality that will make it the measuring stick for all their other places.

In the first place, to make the men of the Army and Navy Schools really at home we ought to make them feel as if they were an integral part of Technology, one with us as far as possible. The dances to which the Aviators were invited have helped. The Technology Monthly has helped by making its issues full of material that interests them and by urging them to contribute. An effort to arrange athletic contests between our athletic teams and those that the Schools can put forth would surely interest a large number of the men. The fraternities of Technology can help a lot by looking around among the men in the Schools for Brothers from other chapters. Just stop and think how good a friendly grip feels when you are away from home. It might not be a bad plan if some of the men who live not too far away could show some of these men, who are miles from their homes, a little New England home-life. Just think how they would like to get away from the Caf.

The Technology Undergraduate body must take upon itself the duties of host and overlook no detail that will make the stay of its guests a little bit more pleasant, their discipline a little bit less irksome, and their task a little lighter.

ENTER VOLUME XXXVIII.

ENTER Volume XXXVIII, exit its predecessor. Today's issue of The Tech is the first of a new series, the thirty-eighth series to be started since The Tech was founded in 1881. The new volume will succeed Volume XXXVII, which has served so successfully Technology Undergraduates and Alumni for the past year, as a war-time paper and will appear as usual on Wednesday and Saturday.

The Tech wishes at this time to thank all workers on Volume XXXVII for the cooperation which made possible the War-Time Tech and to announce the elections to the new Volume.

The Managing Board of Volume XXXVIII consists of the following: Chairman of the Board, Paul C. Leonard '17; General Manager, Donald D. Way '19; Managing Editor, Count B. Capps '20; Circulation Manager, Lincoln B. Barker '21. Kenneth Roman '20 and Homer V. Howes '20 are appointed Night Editors; Reginald H. Smithwick, '21 assistant Night Editor; and Carole A. Clarke '21, Military Editor. Zambry Giddens '21 and Henry Kurth '21 are promoted from the News Staff to the News Board. C. F. Parker '21 and D. T. Carpenter '21 are elected to the News Staff. R. H. Damon '21, H. F. MacMillan '21, and H. D. Moore '21 are to be assistants to the Circulation Manager.

AGAIN

THE question of Tech freshmen not saluting when they should is getting almost hackneyed. The other day the colors of the Army Aviators passed the freshmen regiment, just dismissed. The officers gathered in one corner very properly set an example by coming to attention and giving to our national emblem the honors due it. Then the colors passed down thru the crowd of freshmen and scarcely a man even recognized its presence. To cap the climax, the officers offered no reprimand. There is surely something radically wrong with discipline here at the Institute and something really lax when men in uniform can ignore the standard of our nation.

THE TECH regrets to announce the resignation of G. Russell Steining '21, as Assistant Night Editor.

EMPLOYMENT IN SHIP YARDS

(Continued from page 1)

salized, in which each board is previously cut and ready to apply. This change has been accompanied by a decrease in the room needed by each man, and an increase in the speed and efficiency of his work.

In view of the great demand for men to work in the shipyards on the new wooden ships, President MacLaurin, with the aid of several members of the faculty of the Institute, has commenced arrangements with several ship-building corporations of the East to receive into their employment during the coming summer a certain number of students from the freshman and sophomore classes. In addition to aiding in supplying the demand for workmen of all sorts in the shipyards, this plan will help to give good employment to those students of the two lower classes who so desire. Of course, as both the junior freshmen and the juniors will pursue their studies throughout the summer, they will not be able to take advantage of this excellent opportunity offered to the institute. The chief part of the work will consist of rough carpentering, but those who have had experience as electricians or metal workers, will have ample opportunity to exercise their ability to good advantage. The compensation for the work will be the same as the high wages received by those now in the employment of the ship-building companies.

As one of the problems confronting the plans of President MacLaurin was the one of obtaining proper and yet inexpensive boarding places for the students working at the shipyards. This difficulty can now be overcome by the Y. M. C. A. buildings and camps which are being rapidly established at the shipyards. In just sympathy with the work which President MacLaurin is carrying on, the railroads and private automobile owners have stated their willingness to assist in transportation in any way possible. Although the plans have not yet been carried out to completion, the personal visits and efforts of Dr. MacLaurin and Professor Peabody foretell success in every possible way. It is expected by all interested that the freshmen and sophomores will take advantage of the splendid opportunity which will undoubtedly be presented, and show their appreciation of the work which the faculty is carrying out for them and their country.

A problem which might seem to arise in the keeping of such a large number of men as is required by the shipyards, in good health and out of harm's way, is amply taken care of by the rather new system of self insurance, by which workmen are protected by a department of the corporation entirely devoted to that purpose.

Technology is not the only institution which is considering the plan of fitting men for the ship-building trades. A first attempt at intensive instruction will be undertaken at the University of Rochester where a six weeks' course will be given. If this proves to be successful other courses will be started at Harvard University, and the University of Columbia.

NAVAL RESERVE UNIT

(Continued from page 1)

eligibility list. The enrollment is for four years; but in event of their being called at the termination of their course, they will be examined for their special work and re-rated for active service.

Further detail is contained in the following extract from the following letter from the direction of E. S. Root, February 1, 1918.

To Commandant, First Naval District.
Subject: Enrollment of under-graduate students of the technical universities.

1. In order to insure the future engineering men of the Navy, the Bureau desires to enroll under-graduate students of technical universities in the Naval Reserve Force.

2. The Bureau therefore directs that any undergraduate over 18 years of age and who is actually taking a technical course at a technical university, and physically qualified, may be enrolled in the Naval Reserve, class 4 for general service, as seamen, second class.

3. These under-graduates will not be called to active duty until they have graduated, except in case of great emergency, which emergency, the Bureau at present does not foresee.

4. No promise of commission will be given these under-graduates, but when graduated and called to active service they will be examined and re-rated according to their ability and the requirements of the service.

E. S. Root,
By direction.
This attractive arrangement should meet the hearty approval of all students who are eligible. Any one who has any

(Continued on page 3)

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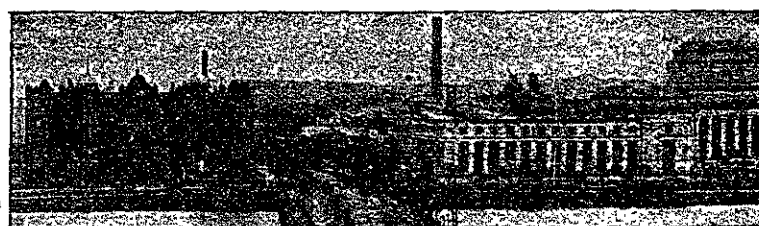
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**GREAT OPPORTUNITIES AFFORDED AMERICAN
ENGINEERS FOR SERVICE IN CHINA**

The visit of the American Red Cross Mission to Russia last summer for the purpose of studying the conditions prevailing in that country has incidentally thrown a great deal of light upon the opportunities afforded the American engineers for service in China. It was while on these trips that they had a very short time in which to perceive the engineering problems although the time during which they were in China was of such a short duration that it was impossible to fully investigate these problems.

By far the greatest opportunities are offered to the students of mining engineering inasmuch as China is one vast country filled with mineral resources as yet undeveloped owing to the lack of capital and technically trained men. It is these vast resources as well as the unlimited water power which call to the engineer of America.

At present the industrial situation of China is far from desirable. The industries are in an impoverished condition and practically no war orders are being filled, whereas Japan is busily engaged in filling orders for war materials for the allies. Together with this industrial stagnation comes the overwhelming misfortune of a large national debt.

China could more than pay off this debt if she were only able to finance projects for the development of her natural resources. Here is the opportunity for American capital to be invested, promising great pecuniary rewards to the investors. Another thing which tends to act as a drawback to China is the total lack of employment of scientific methods. The country is backward in all technical education and an injection of the American methods would serve as the needed stimulus.

Rich mines dot the map of China, and these are not restricted to mineral mines but include huge coal deposits as well. It is estimated that there are between 125 and 150 billion tons of coal deposited in China which have not yet been mined. The main reason for the undevelopment of these deposits are the lack of capital and the poor transportation. Gold and silver are found in the northern and southern provinces of China particularly in Manchuria, Tibet and Mongolia. Many of the other metals such as lead, copper, iron and antimony are also found in many of the provinces.

Only this month has the report come to America that copper mines have been discovered in the neighborhood of Yuan Hsien in Paoingfu. A syndicate has been formed and an application has been made to the ministry of commerce and agriculture for the privilege of opening and developing the mines. It is just such opportunities as this that are slipping unnoticed past the American capitalist every day.

To meet the demands for transportation that will come as a result of the development of the mines it will be necessary for the railway engineer to project new roads as well as repair and better the old ones, of which there are few at present. The people still cling to the old forms of locomotion to a

certain extent such as the jin rickshaws and wheelbarrows. The inauguration of the new republic has done much to overcome this tendency and street railways are slowly coming into use. The days of the Old China are slowly passing and the era of New China is superseding them.

An increase of the other forms of transportation other than railways calls for the civil and sanitary engineers. Commerce will call for the development of canals, harbors and rivers. The sanitary engineer must provide better drinking water for the population and remove the causes of fevers.

Professor Whipple, professor of sanitary engineering at the Institute, in his report to the Boston Society of Civil Engineers, of which he is president, states, "In China we were greatly impressed with the importance of the flood problem. It towers above all the other engineering needs of China. The opportunities for engineering work of many kinds in this country are tremendous." All of the other members of the Mission, each of whom was a specialist in some particular branch, were all of the same opinion.

Huge plants and factories will be needed for manufacturing the raw materials into finished products. Business establishments are needed also to carry on the great volume of business which is sure to result.

The mechanical engineer will be needed to design these factories and plants as well as furnish the machinery and tools for them.

Power plants beckon to the electrical engineer. There is an abundance of water power so China should prove to be a Paradise to an engineer in this branch. All kinds of electrical equipment and apparatus are needed as China is in want of these probably more than any other country owing to the fact that during the regime of the emperors all progress has been stifled.

Graduates of naval architectural courses could find enough to do in supplying the great number of ships needed for commerce. However at the present moment there appears to be more than enough to do in this line in the United States, but after the great marine has been built up there will be an oversupply of men in this branch and they will be looking to undeveloped countries in which to cast their lot.

Aerial navigation would prove to be a boon to China as well as to the United States. Many of the men now being trained in this branch of occupation could find plenty of opportunities in China for pecuniary reward as well as for development of new ideas.

It is with a knowledge of the need for technically trained men that the Chinese government is now sending a number of students yearly to the Institute for instruction in the different courses. The number however is entirely inadequate to meet the needs of China so it devolves upon the American engineers to help in supplying this demand. Besides securing great profits in their respective branches they would gain the gratitude and friendship of a nation sure to become great in the future generations.

WOMEN'S WORK AT TECHNOLOGY.

At the council meeting in Chicago on April 12 of the Association of Collegiate Alumnae, Alice G. Bryant, A. B., M. D., '86, will be the representative of the Massachusetts Institute of Technology in place of Miss Mabel Keyes Babcock, A. B., S. M., '08, who is the regular councillor. The matters which keep Miss Babcock in Boston at this time are in relation to the mobilization of women in land service work. To her has been committed the direction of the agricultural courses at the Lowthorpe School, Groton, the movement being under the chairmanship of Mrs. J. Montgomery Sears. The lectures at this school are to begin on April 2, and the first of them is to be by Wilfred Wheeler. The school itself has been well known in Massachusetts from its foundation sixteen years ago, and at the present time it is undertaking special courses which will fit women for the supervision and direction of farming work. It is appealing to women of intelligence and in the cities some of the teachers have been excused, as a war need, to attend the special lectures. The students will live at Groton and spend their time in the greenhouses or on the land, and will have experience in the outlying farming district. The courses as laid out by Miss Babcock, will include general agricultural conditions; it will take up the chemistry of soils; the science of plant growing, with enough scientific botany to make the matter clear; the use of fertilizers; the functions of tools, small and large; the treatment of vegetables, fruits and general farm crops; the care of animals and the business principles of farm manage-

ment. It is to be, not a fad, but a real contribution towards supplying in this country, women who can take the place of the intelligent farm managers, who go to the front or find places in the industries of war.

In a kindred line of work, another M. I. T. alumna, Miss Matilda A. Fraser '99, of the department of Mathematics Girls' Latin School, Boston, will this season take supervision of 300 students' war gardens.

**GENERAL PERSHING ASKS FOR
SKILLED CANAL ENGINEERS.**

The inland waterway system of France in the region occupied by American troops will be used for transporting some of Gen. Pershing's supplies. A request from him calls for the organization here of special engineer units for the operation and maintenance of the canals. The new units probably will be known as inland waterway companies. Men trained on American canals and rivers will be sought to fill up the ranks of the companies and canal engineers will be selected as officers.

FOUND ARTICLES.

The following articles can be obtained by calling at the office of the Superintendent of Buildings and Power, Room 3-005.

One copy "French Grammar," 1 copy "Influence Diagrams," 1 light gray cap, 1 gray and black striped scarf, 1 gray scarf, 1 purple scarf, 3 small black handbooks, 1 metal protractor, 1 celluloid protractor.

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NEW SUNDAY TABERNACLE

The tabernacle being used by Billy Sunday in his efforts to make Chicago a "Holy City" is a striking example of the stupendous forces mustered by that famous evangelist to put the devil out of business. Though built entirely of wood, the tabernacle, erected here by Rev. William A. Sunday for his revival campaign of a few weeks, will, no doubt continue to be used as an auditorium for years to come.

The magnitude of Sunday's enterprise may best be judged from the following partial list of materials used in the construction of his tabernacle.
Lumber—600,000 board feet.
Shavings for the floor—300,000 pounds.
Sawdust for the trail to be "hit" by sinners—300,000 pounds.
Nails—16,000 pounds.
Roofing—100,000 square feet.
Glass—1,700 panes, 12in. by 12in.

The building covers an area of two and a half acres, seats more than 13,000 persons and cost \$65,000. It is the biggest building ever put up by Billy Sunday.

Probably the most amazing thing about the building is its acoustic properties. Not only Billy's 72 centimetre voice, but the voice of a child standing on the speakers platform can be heard at any point in the tabernacle. This accomplishment is attributed to three things by James Shedden, builder of the tabernacle.

"In the first place," he said, "the building is a thin wood shell as resonant as the body of a violin. Secondly the turtle back or ocean shell roof sends all sound waves downward and thus acts as a sounding board in itself. Then this is augmented by the megaphone which hangs over Mr. Sunday's head."

SHOW NOTICE.

From now on it will be absolutely imperative for all men attending show or orchestra rehearsals to be present at all of their respective rehearsals and be there on time. During the past week there have been a number of absences, especially in the orchestra, and also much tardiness. This cannot continue any longer, because if one man is late it renders the work of his entire organization incomplete and ineffectual. Members of the ballet are particularly warned to watch the bulletin board either by the Bursar's office or in building 2 for extra rehearsals. Management meetings will be posted on the Bursar's board only. The cast and chorus will please keep both Saturday afternoon and evening of this week open, as it is not yet definitely decided at what time the rehearsal will come. The time will be posted as soon as possible.

NAVAL RESERVE UNIT

(Continued from page 2)
idea of enlisting, should not fail to consult Lieutenant Stobla. There are notices on the bulletin boards about the Institute. The party is to remain at Technology but one week, and it has already been here several days; so do not put off your consultation.

FINANCE REPORT

Below is given the fourth of a series of reports on the financial condition of various undergraduate activities. For the present one report will be published in each number of THE TECH, and this practice will be continued as long as deemed advisable by the Finance Committee. The regulation of published reports now lies in the hands of the Finance Committee's Committee on Reports. The committee consists of W. Wyr, S. W. Fletcher, J. W. Reis, Jr.

Technology Rowing Association

Term ending Jan. 31, 1918

Receipts
Cash balance, Oct. 1..... \$3.24
Student tax 60.00
Alumni donations 28.16
\$91.40

Expenditures
Back rent, 1916-17..... \$18.50
Repairs 34.50
Miscellaneous 9.63
Balance, Jan. 31..... 91.40

Balance Sheet
Assets
Cash \$28.77
Liabilities
Accounts payable..... \$13.50
Repairs 15.27
Net worth \$28.77

(Signed) M. A. Louchs,
Manager.
W. Wyr,
Chairman Finance Comm

TRACK REMOVED

The spur track which formerly ran up behind The Tech office has been ripped out. It was owned by the Stone & Webster Company and built for their convenience during the construction of the Technology buildings. It was the intention of the firm to allow the rails to remain in place until the building plans were completed, but owing to the present shortage in rails, it is imperative that they be put into use.

It is a decided improvement, however, for the field is now clear and is available for a drill ground. The Technicolor car will now be in a less conspicuous spot near the power plant.

**PHILADELPHIA CLUB TO
HOLD ANNUAL MEETING**

The Technology Club of Philadelphia will hold its annual meeting on Wednesday, April 3. The program is divided into three parts, the first consisting of an informal dinner to be held at 6.30 o'clock, after which will follow the annual meeting and election of officers at 8.15 o'clock. The last part of the program will be an illustrated lecture on "Fire Protection" by Mr. R. E. Page, '06, of the Philadelphia Manufacturers Fire Insurance Company. All the members of the Association are urged to attend this meeting, as many plans preparatory to the Field Day will be discussed.

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TECHNOLOGY TO HAVE SECOND SCHOOL FOR RADIO ENGINEERS.

So successful has been the school for Radio Engineering at the Institute that a second school will be started as soon as the existing one has ended its fifteen weeks, which will be in June. Already Professor A. E. Kennelly, the head of the school has made a tentative canvass of the Juniors in the Electrical Engineering course, with the result that nearly all the young men, some twenty or thirty in number, will be candidates for registration in the new school.

The school is undertaken at the request of the U. S. Signal Corps. It is open only to Americans by birth, and the young men at the conclusion of their work may be enlisted in the Corps. There are seventeen in the existing school, sixteen of them Technology men, and the other a young man from the electrical department of the Virginia Polytechnic Institute, son of the professor of Electrical Engineering at that school.

The progress of this group has been so satisfactory that the Signal Corps has asked the Institute to undertake other schools along the same lines.

The work demands first the grade of Senior in regard to engineering attainments and then some special knowledge of electrical principles. To this will be added fifteen weeks of twenty-four hours' study a week in the special work prescribed by the Government. There will be in addition two groups of lectures given by Professor Kennelly and Professor E. Leon Chaffee of Harvard, the laboratory work being divided between the Institute and the University, the latter of which is especially well provided with devices useful in wireless study. The work is intensive and leads not to radio signalling, for which excellent schools exist elsewhere, but to the fundamental engineering principles underlying construction and the making and maintaining of the delicate apparatus necessary. The new school will begin in June and continue through the vacation.

THE SNIPER BLOKE

(By L. T. CARPENTER '21)

Yes, we are the snipers of regiment B
And as fine a bunch as you'd want to see.
Our general's name is "Red Pepper" Jones,
And Gad! 'e's a fighter from beef to bones.

'E's a temper as big and hot as 'ell
And 'is language is worse than I can tell
But we love the old boy from top to toe,
And we'd all of us die for him. That I know.

Well along one day comes a little bloke.
'I'm joining the snipers,' 'e up and spoke.
'E was green as grass, thought 'e knew it all,
And 'is name was Jones like the General.

But 'e started in fine. 'E could shoot all right.
So 'e plugged the 'uns for 'e loved the fight.
As a free lance 'e was as good as gold,
But with 'im the discipline didn't 'old.

If orders were eight, 'e'd stay till ten.
Then 'e'd take 'is fatigue and do it again.
But the chances 'e took were too darn slim
So at last 'e got what was coming to 'im.

Red Pepper got wise to the bloke at last,
And sent for the blighter and got 'im fast.
Poor Jones didn't know 'e was good as dead
For 'e gave us the wink. "Got to call on Red."

Old Red was adornin' 'is dug-out door
And thinkin' up sware-words 'e 'aden't swore,
When along comes Jones like 'e meant to say
"Glad to meet you, Sir, a pretty wet day."

But 'e stops up short and 'e gives a yell
When 'e gets a look at the General.
And the General looks and 'e 'ollers too
And 'e says "My God! Is it really you?"
And Jones gives a whoop, "If it ain't my Dad;
Blimey but won't my Ma be glad."

ONLY FIVE U. S. FIRMS PRODUCING MAGNESIUM

Four American firms were responsible for all the production of magnesium in the United States in 1916—75,400 pounds, valued at \$311,570. In 1917 five firms produced 115,800 pounds, valued at \$233,600. In spite of an increase of 65 per cent in quantity there was a decrease of 25 per cent in value, for the average price fell from \$4.13 a pound in 1916 to \$2.16 a pound in 1917. The price early in 1916 reached \$5 a pound. Late in 1917 it fell to \$1.85 a pound.

The statistics of production here given were collected by Frank L. Hess, of the United States Geological Survey, Department of the Interior. They show that in 1916 magnesium was made by the Electric Reduction Co., Washington, Pa., Norton Laboratories (Inc.), Lockport, N. Y.; Rufford Metal Co., Rufford, Maine; and General Electric Co., Schenectady, N. Y. The Electric Reduction Co. has found it more profitable to use its power for other purposes, but the other companies named produced magnesium in 1917. The American Magnesium Corporation, the successor of the Aviation Materials Co. at Niagara Falls, made an output in 1917, and the Dow Chemical Co. began production at Midland, Mich., but was prevented from operating at its full capacity by shortage of coal. The General Electric Co., which in 1915 had been forced to make magnesium in order that it might have the metal it needed for its own work, closed its plant in 1917, as the industry is now well established in this country and the price has fallen to a point near that which prevailed before the war.

The Rufford Metal Co. and the American Magnesium Corporation have investigated and produced alloys of magnesium with aluminum, calcium, copper, iron, nickel, and silicon.

MABEL K. BABCOCK '08 TO DIRECT FARMING COURSES

Under the chairmanship of Mrs. J. Montgomery Sears, Miss Mabel Keyes Babcock, '08, will have the direction of the agricultural courses at the Lowthorpe School at Groton, Mass. Miss Babcock is now mobilizing the women about Boston and vicinity for land service work. It is not to be a fad in any sense of the word, but a real contribution towards supplying women in this country to take the place of intelligent farm managers who go to the front or find places in the industries of war. The women will be instructed in the business principles of farming, general agricultural conditions, the chemistry of soils, plant growing, the use of fertilizers, the treatment of general farm crops, and the care of animals. The students will live at Groton and have experience in the greenhouse and in the outlying farm districts. The first lec-

ture will be delivered by Mr. Wilfred Wheeler, April 2.

In a similar kind of work Miss Matilda Fraser, '99, of the mathematics department of the Girls High School, Boston, will supervise 300 students' war gardens.

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HELP!

In order to keep its military file of Technology Men in Service up-to-date, The Tech earnestly requests its readers to send in more complete information concerning the men whose names are printed in this column.

The Tech is co-operating with the M. I. T. War Service Auxiliary and the Alumni Association in keeping the Honor Roll, and all data regarding men in Service will be communicated to the two latter organizations.

It is important that YOU keep in touch with us, Mr. Technologist. Address all information of this character to the
Military Editor, THE TECH
Charles River Road
Cambridge, Mass.

BROWN, LOUIS J. '19, Pvt., A. N.
BURRAGE, SEVERANCE '92, Maj.
CLARK, ROBERT C. '96, 2nd Lt., Cav., N. A.
COPELAND, WILLIAM '93, Pvt. or Corp., Pa. N. G.
CORY, MARCUS M., '11, National Army.
COWLES, W. C., Jr. '18, U. S. N. R.
DRAKE, ALLEN F. '18, Inf., Camp Devens.
GRAVES, DONALD S. '20 Seaman, 2nd cl., U. S. N. R.
HADLEY, H. S. '20, Amb. Serv., A. E. F.
HENDERSON, RUBEN S. '99, was in Amer. Amb. Serv.
HIGBEE, H. A. '10, Red Cross, Paris.
HINCKLEY, N. C. '18, was Flying Cadet, Avia. Sec., Sig. Cps., M. I. T.
HOLBROOK, WALTER A. '03, Ensign, U. S. N., or Capt., E. O. R. C.
HOLMES, WILLIAM N. '13, C. A. C., U. S. A., A. E. F.
HUSSEY, JAMES W. '00, Lt., Naval Avia., or Ensign, U. S. N. R.
INGRAHAM, FRANKLIN T. '16, Avia Cps., or C. A. C.
IRELAND, GILBERT M. '14, British Army.
JAMES, EDWIN W. '07, in Military Service.
JASTONOWSKI, V. A. '16, Lt., C. A. C.
JOHNSTON, NORWOOD P. '19, was in Amer. Amb. Serv.
JONES, WILLIAM A. '18, was in Avia. Cps. at M. I. T.
KURTZMANN, CHRISTIAN '09, 2nd Lt., Camp Q. M. Asst., Q. M. C.
LANG, W. W. '12, Pvt., N. A.
LARRABEE, JOHN H. '00, U. S. N., Navy Bldg., Wash.
LUYKX, DIRK J., '19, Field Amb. Serv. in France.
MACALISTER, ALEXANDER G., Jr. '18, 3rd O. T. C., Camp Upton.
McFARLIN, CHARLES K. '14, was with U. S. Nav. Avia. Det., M. I. T.
MACLEOD, NORMAN D. '14, Capt., Adj., 103 Regt., 6th F. A., A. E. F.
MEANS, ROBERT S. '19, Co. T. Bat. A, P. O. C. B., 301st F. A.
MOORE, L. E., '02, Capt., 301st Engrs. Staff, care of D. G. T., A. E. F.
MOORE, WILLIAM W. '14, in Military Service.
MORRISON, A. F. '12, Lt., Ord. Dept., temporarily at Wash.
OSBORN, STANLEY H. '15, 1st Lt., Med. Sec., O. R. C.
PARKS, GEORGE U. '19, Pvt., Amer. Air Serv., Paris.
PIGEON, F. B. '11, 2nd Bn., F. A., Plattsburg.
POND, THOMAS C. '15, 1st Lt., at Camp Lee.
PRATT, HAROLD G. '19, was with U. S. Nav. Avia. Det., M. I. T.
PROUTY, T. R. '12, 2nd Lt., 301st Inf., Camp Devens.
REED, JAMES D., Jr. (no numerals), Nav. Constr., Navy Dept., Wash.
RHODES, W. S. '95 or '97, 1st Lt., Amer. Univ.
ROCKFORD, J. L. '99, 2nd Bn., F. A., Plattsburg.
ROGERS, CARL (no numerals), 5th Additional Co., Depot Brig., Camp Devens.
ROSENTHAL, CHARLES H. '15, Pvt., Inf., or Ord., Camp Sherman.
SHERMAN, FORREST P. '17, U. S. N. SHIPPEY, WEBSTER '17, Candidate, C. A. C., Ft. Leavenworth.
SHIRER, HAMPTON F. '18, Amb. Cps. STEWART, U. S. '15, Mach. Gun School, Springfield Armory.
STONE, NELSON '15, O. T. C., Fort Niagara, New York.
TOBIN, JAMES JOSEPH '09, Constructing Q. M. Dept.
TOWNE, LOCKWOOD J. '09, in Military Service.
TRAVIS, L. L. '02, 2nd Lt., 8th Engrs., Ft. Leavenworth.
TRAVIS, L. L. '15, Pvt., O. D., 163rd Depot Brig.
WALSH, J. H. '07, Lt., Asst. Nav. Constr., Wash.
WARREN, WILLIAM H. '14, 1st Lt., Sig. Cps.
WORTLEY, RALPH W. S. '19, was in R. O. T. C., Harvard, during 1917.
WRIGHT, HENRY W. '18, was with Amer. Fld. Amb., A. E. F.
WYMAN, GEORGE W. '16, was Asst. Instr., Ground School, M. I. T.